

Notice of Allowability

Application No.

10/757,894

Examiner

Melur Ramakrishnaiah

Applicant(s)

KIM, HOE-WON

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1-15-2004.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

Melur Ramakrishnaiah
MELUR RAMAKRISHNAIAH
PRIMARY EXAMINER

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance: The present invention relates to a call connection method for a mobile communication system, and more particularly to a paging method for a mobile communication system.

The prior art of record in combination or alone fails to teach or suggest these elements of independent claims 1, 3, 7, 8-10 in combination with other elements. For example independent 1 has claim limitations such as a first step of setting an initial paging value in a base transceiver subsystem (BTS) for paging a mobile communication terminal within the BTS for a first period of time and checking a response to the paging, a second step of performing an operation according to the paging of the mobile communication terminal if it is confirmed that the response has been received through the checking at the first step, while replacing the first period with a second period obtained by dividing the first period by a predetermined value if it is confirmed that no response has been received through the checking at the first step, a third step of returning to the first step by replacing the first period with a minimum period preset by the initial value if the first period replaced at the second step is smaller than minimum period, and a fourth step of returning to the first step by replacing the first period with the first period replaced at a second step if the first period replaced at the second step is larger than the minimum period. Independent claim 3 has claim limitations such as first step of setting an initial paging value in a mobile communication terminal for checking whether a paging channel is received by performing a search for the paging channel for a first period of time of a base transceiver subsystem (BTS) to which mobile

communication terminal belongs, a second step of checking whether paging is for the mobile communication terminal by analyzing the information of the received paging channel if it is confirmed that paging channel has been received through the checking at first step, a third step of returning to the first step by replacing the first period with a second period obtained by dividing the first period by predetermined value if it is confirmed that the paging channel has been received through the checking at the first step, and a fourth step of performing an operation according to the paging if it is confirmed that paging is meant for the mobile communication terminal through the checking of the second step, while returning to the first step by replacing the first period with a third period obtained by multiplying the first period by a predetermined value if it is confirmed that paging is not meant for the mobile communication terminal through the checking. Independent claim 7 has claim limitations such as a first function of a base transceiver subsystem (BTS) provided with a processor and having set a initial paging value paging a mobile communication terminal with in the BTS for a first period and checking a response to the paging, a second function of performing an operation according to the paging of the mobile communication terminal if it is confirmed that response has been received through the checking by the first function, while replacing the first period with a second period obtained by dividing the first period by a predetermined value if it is confirmed that no response has been received through the checking by the first function, a third function of performing the first function by replacing the first period with a minimum period preset by the initial value if the first period replaced by the second period is smaller than the minimum period, and a fourth function

of performing the first function by replacing the first period with the first period replaced by the second function if the first period replaced by the second function is larger than the minimum period. Independent claim 8 has claim limitations such as a first function of a mobile communication terminal provided with a processor and having a set initial paging value checking whether a paging channel is received by performing a search for the paging channel of a first period of a base transceiver subsystem (BTS) to which mobile communication terminal belongs, a second function of checking whether the paging is for the mobile communication terminal by analyzing information of the received paging channel if it is confirmed that the paging channel has been received through the checking by the first function, a third function of performing the first function by replacing the first period with a second period obtained by dividing the first period by a predetermined value if it is confirmed that the paging channel has been received through the checking by the first function, and a fourth function of performing an operation according to the paging if it is confirmed that the paging is meant for the mobile communication terminal through the checking the second function, while performing the first function by replacing the first period with a third period obtained by multiplying the first period by a predetermined value if it is confirmed that paging is not meant for the mobile communication terminal through the checking. Independent claim 9 has claim limitations such as a first step of performing a paging with respect to a mobile communication terminal in a base transceiver subsystem for a specified first period and checking a response from the mobile communication terminal, a second step of comparing a second period obtained by dividing the first period by a specified integer

Art Unit: 2614

value with a specified minimum period as the smallest period if no response for the paging has been received from the mobile communication terminal, a third step of returning to the first step by replacing the first period with the minimum period if the second period is smaller than the minimum period, and a fourth step of returning to the first step by replacing the first period with the second period if the second period is larger than the minimum period. Independent claim 10 has claim limitations such as a first step of a mobile communication terminal performing a search for a paging channel of a base transceiver subsystem to which mobile communication terminal belongs for a specified first period, a second step of comparing a second period obtained by dividing the first period by a specified integer value with specified minimum period set as the smallest period if no response for paging has been received for a first period, a third step of returning to the first step by replacing the first period with the minimum period if the second period is smaller than the minimum period, and a fourth step of returning to the first step by replacing the first period with the second period if the second period is larger than the minimum period. For the above reasons Independent claims 1, 3, 7, 8-10 and dependent claims 2, 4-6, 11 are allowable.

2. Claims 1-11 allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

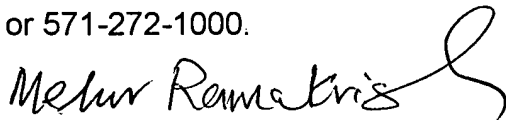
--(US 2001/0015963) to Tuomainen et al. discloses a method for reducing power consumption of a mobile station connected to a packet switched network. In this method, a paging period is specified for mobile station for sending paging messages essentially at the intervals of the paging period to the mobile station.

--(US2005/0148348A1) to Cramby et al. discloses an invention which refers to method and systems for enabling paging and DRX in a hybrid cellular communication system comprising a core network and a radio access network employing different paging techniques.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (571)272-8098. The examiner can normally be reached on 9 Hr. schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Melur Ramakrishnaiah
Primary Examiner
Art Unit 2614